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Developing the External Engagement Process in Higher Education through Effective Change and Technology

Irene Sheridan
Cork Institute of Technology

Colm Barry-Murphy
Cork Institute of Technology

Heather Madden
Cork Institute of Technology

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Irene Sheridan

Cork Institute of Technology

CIT Extended Campus

Cork, Ireland

Irene.sheridan@cit.ie

Colm Barry-Murphy

Cork Institute of Technology

CIT Extended Campus

Cork, Ireland

Colm.barrymurphy@cit.ie

Heather Madden

Cork Institute of Technology

IT Services

Cork, Ireland

Heather.madden@cit.ie

Abstract: Engagement with external organisations and enterprises is increasingly part of the higher education mission and the contribution of universities to local and regional economic and social development remains an important, but difficult to evidence, metric for Higher Education Institutions (HEI). This paper explores the implementation of a Customer Relationship Management (CRM) system to support external engagement and to build business intelligence in one higher education institution in Ireland.

Building on the findings of the Roadmap for Employment-Academic Partnership (REAP) project, through a structured process towards a professional case management approach to interactions this project focuses on the introduction of a CRM system in Cork Institute of Technology as a supporting and reporting mechanism which allows the collation of information on current and previous interactions with external organisations. When in place, the system will provide the HEI with a full overview of the current interactions at any point in time with an external organisation as well as providing valuable information to the strategic planning process. The work reported on in this paper and the work of the REAP project generally, was supported by the Higher Education Authority (HEA) under the Strategic Innovation Fund (SIF).

Keywords: Change Management, Customer Relationship Management (CRM), External Engagement, Higher Education.

INTRODUCTION

Bezboruah states:

> *Change is a permanent feature and an on-going process in organisations and institutions. Change can be proactive or reactive, incremental or discontinuous and through choice or due to an impending organisational crisis* (Bezboruah, 2008:130).

Burnes (2004) believes that modern organisations are complex systems and in order for them to survive in modern society they must respond continuously to changes in their environments through a process of spontaneous self-organising changes. This view is in line with the commonly expressed adage 'the only constant is change'. One of the most influential contributors to the early development of change management models is Kurt Lewin (1890 – 1947). Similar to all other organisations, educational institutions face pressures for change. Although Baer *et al.* (2008) and Bezzina (2006) suggest that educational institutions are often accused of resisting changes and being slow to adapt in a rapidly changing environment. Hughes (2007) considers the paradox presented by the fact that academics, who are at the forefront of knowledge generation and might be expected to embrace change, tend to react negatively or with mistrust.

The recent economic recession experienced in Ireland and indeed throughout Europe has acted as a significant driver for change in relation to higher education engagement with enterprise and contributions to regional development. Nelles and Vorley (2010) propose a pragmatic approach to consolidating the often disparate parts of the university contributing to entrepreneurship and commercial engagement. They highlight the need to recognize the separate capacities and capabilities and view them as central to the third mission development. Considering the motivation for institute-wide approaches to engagement and the findings from a Higher Education Authority (HEA) funded inter-institutional project, this paper traces the piloting of a CRM system to support engagement in one higher education institute in Ireland. CRM is a model for storing an organisation's interactions with both internal and external entities in a single database. In the higher education environment this would provide the basis to understand the range and depth of engagement interactions with external organisations as well as supporting the deployment of strategies, processes, and technologies to strengthen relationships with customers throughout their life cycle (Nair *et al.* 2006).

Institution-wide approaches to Engagement

In Ireland, the National Strategy for Higher Education (Department of Education and Skills, 2010) places significant emphasis on engagement with the wider society, along with teaching and research as a means by which higher education can contribute to addressing societal and economic challenges. While recognising that higher education institutions have been involved in a wide range of engagement activities the national strategy document suggests that these activities have not always been coherent and coordinated or embedded in the core of higher education missions generally. Internationally, an OECD report "Higher education and regions: Globally Competitive, Locally Engaged", (OECD 2007) explores the complex landscape within which higher education institutions play a role in their regions.

Goddard (2009) proposes a broad institutional approach:

> *Engagement has to be an institution wide commitment, not confined to individual academics or projects. It has to embrace teaching as well as research, students as well as academics, and the full range of support services. All universities need to develop strategies to guide their engagement with wider society, to manage themselves accordingly and to work with external partners to gauge their success.* (Goddard 2009: 4)

Vorley and Nelles (2008) describe the third mission as a 'thread that has the capacity to weave together teaching and research, while assuming a more economic and societal focus'. Viewed in this way engagement is not separate from education and research, but rather a new lens through which to view teaching and learning and research activities.

Burns (2005) regards the process of embedding the engagement mission as an opportunity for organisational learning. Vorley and Nelles (2008) stress that engagement between industry and academics in collaborative research and commercial experience can make a significant contribution to teaching and curriculum development and that the students themselves can become the bridge for the engagement through industry sponsored projects and cooperative placements.

ENGAGEMENT IN PRACTICE

Through the Department of Education and Skills' Strategic Innovation Fund (SIF) a number of initiatives aimed at advancing engagement through collaborative work within the higher education system were funded. The Roadmap for Employment Academic Partnerships (REAP) (2008-2013) project funded through the SIF was a collaborative project initiated to consider and to advance a broader range of potential engagement with external enterprises. The project, which was led by Cork Institute of Technology (CIT), involved eight higher education institutions as partners. The REAP project team have developed an approach to underpin engagement activity involving the establishment of clear points of contact, matrices of expertise and an institution-wide professional approach to the flows of knowledge and interaction between higher education institutions and enterprises or communities. The developing national and international landscape within which engagement is clearly valued will expedite the changes in culture and mindset needed. The need for institutional transformation was clearly recognised in the National Strategy for Higher Education:

> *Institutions need to be internally adaptive in order to be externally responsive, and strong engagement with the wider community will require …Change in the culture and internal business processes of institutions…*

(Department of Education and Skills, 2010: 78)

Through exploration of existing relationships between Irish higher education institutions and external entities it is evident that the HEI tends to operate not as a single homogenous entity but as

a series of separate and distinct units. The experience from the perspective of an external partner then, is not one of a single, seamless relationship but of many disparate and different relationships with different parts of the institution. A recent national survey of employers' views of Irish Higher Education outcomes identified the need for greater engagement and openness, with a particular emphasis on the need for a joined-up proactive approach by HEIs (McGann and Anderson 2012). Academic and research units can operate as separate and sometimes competing entities from the perspective of the external partner. One exploration of engagement interactions found that a HEI might be involved with an organisation for undergraduate internships or workplacements, customised learning and continuing professional developments, funded research projects, guest lectureships, graduate recruitment, sponsorship and endowments simultaneously through a number of different academic departments and research units. Initial investigation found that there was no single view of this relationship extant within the HEI. Without a clear institutional view of the depth and breadth of engagement interactions, it is difficult to achieve any organisation learning or to develop potential strategies that might benefit from a more integrated response.

CRM in Higher Education

In seeking therefore, a transversal mechanism to support a coordinated institutional response, Cork Institute of Technology sought a customer relationship management (CRM) solution to support and stimulate the full range of engagement interactions (Goddard and Puukka 2008). Although a large portion of a system such as this is technological, viewing CRM as a technology-only solution is likely to fail (Chen and Popovich 2003). While information technology assists with the re-design of a business process by facilitating changes to work practices and establishing innovative methods to link a company with customers, suppliers and internal stakeholders (Hammer and Champy, 2009), some of the most significant effort in a project such as this is around the persuasive and human elements. CRM in the public sector tends to be less well-developed than in the private sector and this may present an opportunity for organisational learning and a wealth of practice base from which good practice may be developed. Insofar as CRM systems are used in higher education they tend to be used as a mechanism to engage with potential, current or past students in what is often termed Student Lifecycle Relationship Management. CIT's use of the CRM system for engagement with the business and enterprise community was novel within the Irish higher education sector and is supported by the Higher Education Authority (HEA).

CIT's CRM project allows users to gain an insight into engagement with community and enterprise and to share this knowledge across departments and business units. The implementation of a technological solution was one of many steps in this endeavour, more importantly, it was about bringing people and processes from different areas of the institute together in a structured way and utilising the CRM system to enable this. The intention is that, at any one time, the very broad range of interactions with an external partner can be viewed and explored in depth as required.

A developing a single Institute-wide shared database every piece of interaction counts towards the overall company/enterprise experience with the Institute. Such a comprehensive system has the advantage of providing the institute's management with an informed overview of the complex relationship between the institute and external organisations. As well as providing an opportunity to understand analyse and nurture existing relationships it provides an informed strategic framework for the targeted development of new relationships.

Implementing the Change

CRM is new to higher education and contradicts the silo approach to engagement that can hamper proactive collaboration and interaction with the external world. Knowledge sharing is difficult and culture change is imperative in order for a CRM project such as this to succeed. Technological

change is inevitable in all organisations, and, according to research by Hayes *et al.* (2008), has placed added pressures on organisations within the educational sphere. Likewise, Jamali (2005) believes that increasing technological complexity and the need to diffuse information and technology within organisations is proving to be beyond the capacity of existing rigid hierarchal management systems. The introduction of a significant change in the collation and use of information is sensitive and difficult. The approach taken is to allow the project to grow organically and build trust among the stakeholders. Innovative individuals are key champions for the project that will help the implementation process and have a positive impact on the project as a whole.

A key driver for a CRM for engagement is the external organisation seeking to interact with Higher Education. Clarifying the points of contact and ensuring that the breadth of engagement interaction potential is understood by the external partner are two important aspects of an informed approach to partnership. For any large organisation maintaining current overview of capability and capacity in a dynamic environment can present challenges. Ensuring that the system is structured to meet the needs of the external partner in a meaningful way acts as a very positive motivation. As Jenkins (2010) articulates the external customer's experience is that they are dealing with the 'university' irrespective of the particular academic or research unit(s) with which they are actually interacting.

Another motivating force comes through articulating clearly the benefits for the institution and staff. Developing an overview of the complex map of relationships between the higher education institution and industry partners has the potential to provide each of the interacting agents with an informed perspective, thus avoiding the potential embarrassment of encountering interactions between a partnering organisation and the institution of which they have no knowledge.

While benefits for the external enterprise, the institution, the students and the generation of social and economic value for the region are the main drivers behind the development of systems and structures to support engagement there are many barriers to the successful implementation of a CRM system.

Finnegan and Currie (2010) point to the organisational change and disruption implicit in such a project. They stress the organisational elements and the difficulty in aligning business process and disparity in the views held. Perry *et al.*(2011) stress the importance of building trust and of overcoming the difficulties and concerns around information sharing and the need to demonstrate the value to potential users. There is a clear need to support employees through training, recognition and rewards (Becker *et al.* 2010).

Change Process

People and culture are two of the most important factors when considering any change initiative and a CRM system is no different. Although managing knowledge, and particularly knowledge about relationships, is fundamentally about people who hold those relationships, it can be difficult to share this knowledge within an organisation without the use of technology. CIT initiated a pilot project to implement a technology solution on a trial basis in order to structure and support the sharing of knowledge between colleagues in the institution about engagements with external enterprises and organisations. At the time there were "small islands of knowledge sharing" but no "bridges between these islands" (Smith and McKeen 2009).

A number of questions were raised as part of the CRM feasibility study:

- People: Is there management buy-in? Is there grassroots support? Is there support from various departments and business units?
- Process: What does this organisation do? Does sharing occur at data, information or knowledge level? How is the sharing process facilitated?

- Technology: What technologies are currently available for sharing this type of information? What level of technological experience is present within the organisation? What new technologies might be most appropriate for this organisation?

Research would indicate that implementation of a change process such as the adoption of a system-wide CRM should not take place until the cultural and process issues are dealt with (Beer *et al*. 1993, Johnson and Scholes 1999). At CIT, the approach has been to deliver an out-of-the-box CRM system and sell the basic benefits to users and business units before customising for their group needs. In this way the system would itself aid the decision-making process and provide the background knowledge to further the initiative.

CIT implemented a low cost online hosted solution that can be moved on-premise if required and is scalable as the project grows. The project gained the support of a project sponsor and management in the form of the IT Steering Group and a member of the Institute Executive Board. A CRM Usage Policy was created for all users in order to support good practice in the use of the system. Initially the main driver behind the pilot was the CIT Extended Campus, however in rolling out the pilot across the institution 'champions' or change agents were identified in key areas to act as early adopters helping to shape the solution and to encourage a positive view. As the project was supported by the HEA it was important to ensure that an open approach to dissemination was maintained throughout.

Requirements Gathering

A range of techniques were employed to capture the broad set of requirements that were necessary for CIT to use a CRM system for engagement, these included presentations, brainstorming techniques, use-case diagrams, structured interviews and workshops. Initially the drive for the development of the CRM solution came from the newly formed CIT Extended Campus who articulated the need for:

- a structure to map the overall external engagement activities of any CIT unit at any point in time – as both a record and a stimulus
- a structure to 'map' the range of activities with any organisation at any point in time – as both a record and a stimulus
- an easy-to-use record of communications and interactions with external organisations, particularly the logging of initial 'expressions of interest' and creation of 'new projects'.
- a 'task listing' of what's active and what needs to be driven or monitored

An important early stage in the project was to consider the potential range of interactions with external organisations, in which the institute is and could be engaged. The work of the REAP project team and the concept of the partnership continuum described by Sheridan and Linehan (2011) was expanded to consider the full range of interactions. Codifying this for the purposes of analysis, the types of engagement interactions with enterprises and organisations are loosely grouped as:

Curriculum and teaching collaborations	Customised learning	Research and development	Cultural and Civic interactions
Enhancement of employability and entrepreneurial skills	Recognition of prior experiential learning	Consultancy	Memberships of boards
Course design,	Work-based learning	Specialist facilities and	Sponsorship

development and review		equipment	
Guest lectureship and adjunct faculty	Continuing professional development	Funded undergraduate projects	Volunteering
Careers fairs and company visits	Flexible and on-line learning	Applied research projects	Service learning
Extern examiners		Feasibility and commercialisation	Sporting and sports facilities
Work placement and internships		Patents and licences	Concerts and exhibitions
Graduate recruitment		Supporting entrepreneurship	Alumni relations
Professional bodies		New enterprise support and incubation	

Table I: Indication of the various types of engagement interactions

While this list is not exhaustive it is typical of the higher education landscape in Ireland and serves as a useful starting point for the consideration of the interactions types and the benefits that can accrue from a coordinated approach. It also served to focus on the various types of information on engagement extant in the organisation at the outset and the locations and formats in which that information is held. A diverse range of practices existed in relation to process analysis in the various organisational units involved in external engagement and the requirements gathering process helped to analyse the process stages and to recognise good practice. This analysis and reflection stage was very important in helping to illustrate the benefits of a structured approach to the external customer.

CRM is intended to evolve as a useful resource for the benefit of CIT stakeholders and is now in use in CIT since September 2011. Initially it was implemented with one business unit on a trial basis and has now been rolled out to eight business units including an applied research centre and a number of specialist academic units and departments.

Usage Policy

As the initiative gained momentum it became obvious that the collation of contact information relating to external interactions is sensitive. As Jenkins (2010) reported there is a fear that the contacts and relationships nurtured by individual staff members would be damaged by a central approach that would bombard them with 'junk mail'. Interestingly, the staff members often had the impression that they were alone in their interactions with particular external contacts or organisations and did not realise that, in some cases, many others in the institute also had connections to 'their' contacts. This overlapping of interactions became clear from the start of the initiative as soon as two different business units had included 'their' information on the CRM system. To support the development of clear protocols a CRM Usage policy was created to manage the extent of the CRM deployment or its suitability for particular operations in the Institute and is governed by an executive customer. The executive customer is responsible for oversight on the strategic direction and resourcing of the CRM System, and acts as a point of escalation for decision making and policies relating to the system. This policy assigns a Service Owner and Process Owners in each of the business units. The process owner is responsible for ensuring that a business process is fit for purpose. They should define the business case and the requirements, sponsor the solution, and participate in design and continual improvement of the solution. They should implement new policies, standards and procedures required for the new business process, and provide business prioritisation, funding and project resources from their business unit.

The service owner is accountable for delivering the service consistently to meet the business requirements and service level. The service owner is the primary point of contact for the service, and has final responsibility for design, data model, decision-making or escalation. The service owner owns the service roadmap and development strategy, and manages related vendor or third party relationships. The service owner role may not be directly responsible for people or budget.

CRM users undertake to keep all data as accurate and up-to-date as possible, and to adhere to the formatting standards that are agreed to ensure the integrity of the information in the system. They also agree that at an overview level 'their' entity data is visible to all users of CRM. Security Roles restrict the sharing of some data at more detailed levels.

CRM Champions

Statistical analysis shows over seventy per cent of change initiatives fail (Beer and Nohria, 2000). In attempting to ensure the success of this initiative an effort was made to identify, through workshops, a number of champions/stakeholders who were willing to be involved in the development of the system in areas of the institution with significant engagement interactions with enterprises. A recurring issue during the rollout was the reluctance to share information on contact details or interactions and engagements. Rather than seeking to impose a system on those with reservations the intention is that, through the champions, the benefits of adopting the system will be demonstrated in time.

The impact of changes and the change process on individual employees is the subject of much research; with most agreeing that employees find the process difficult (Carroll 2007). Change, therefore, is difficult and the change process should be approached with care. Humphreys and Langford (2008) believe that the failure of these change processes is often due to senior management's view that change is a dramatic and monumental event rather than a subtle journey. It is intended that this initiative will be afforded the time to undertake that subtle journey which will overcome the uncertainty and fear which often surrounds a change process. The intent is that, working in a consultative way with the champions, the benefit of sharing this knowledge will be shown to far outweigh the concerns and will lead to a successful project. The important thing to note is that a considered approach is best suited. Change in organisations, according to Karp and Helgø (2008), is about the shifting of identifies and the subtle formation of new relationships brought about by communication and the evolution of new shared understanding. They go on to say that leaders in seeking to lead change should find ways that influence the development and direction of change by changing the on-going communication within the organisation.

CRM in Practice

Currently there are more than 40 licenced users of the system within CIT. The participating business units are using the CRM system to:

- Share Account and Contact information across departments
- Understand and record the breadth of existing projects and the associated activities
- Analyse and track these activities
- Manage new projects and cases as they arise
- Identify opportunities for new engagements
- Interact with customers and manage events in a centralised manner
- Perform standard business processes such as contact management, task scheduling and tracking, appointment/calendar scheduling, email support and document storage.

There are a number of factors that have been found to impact on users' interactions with the CRM System:

- Users will need to conform to the CRM Usage Policy
- Usability and accessibility of any system is a key factor to its success. Technical difficulties can obstruct collaboration among users
- Collegiality – respect for information from a variety of sources
- Data Protection concerns around sharing account or contact information with a wider community
- Security and intellectual property: the sensitive aspect of the information being shared
- Commitment of time and resources

Discussion

CRM Strategy

A CRM strategy is essential in order to provide direction and focus (Perry *et al.* 2011). The need for a clear strategy is not driven by technological considerations, but by the need to understand the implications for staff and to predict prevent and where necessary remove, any barriers to the changes required in line with good change management practice (Beer *et al.* 1993). For the success of any change initiative a long-term plan which outlines and clearly communicates the goals is a vital starting point. For this initiative it was recognised that a "big bang" approach was not the way forward. Supporting and building on the success of individual users and championing this success to new users allowed incremental adoption but the longer term, clearly stated goal set the context and the backdrop within which this could be effective. It was important that the system was designed so that it integrated with the users existing email application and could easily become part of their daily work toolkit.

Engagement Strategy

The implementation of a CRM system to support engagement in CIT should be seen in the context of the institution's Strategic Plan. Within the plan the mission statement articulates the commitment to 'continue to be a national and international leader in enterprise engagement and the practice of extending the education campus into the workplace and the wider community' (CIT 2012: 7). It goes on to outline the need to develop an institute-wide commitment to engagement and a professional outward-looking interface through which external communities, organisations and enterprises can interact with CIT. The alignment of the pilot project with the institute plan has ensured that the approach is consistent with the overall engagement strategy and has helped in the acceptance of the CRM approach generally.

Guidelines for a Successful CRM Implementation

While this initiative is far from complete there are some useful lessons that can be gleaned from the work to date that may be of value to similar projects.

1	It is imperative that the initiative be clearly aligned to the institutional strategy with strong support from the institute executive
2	While management level buy-in is important the users must be convinced of the value of the system. This can be ensured through a reflective process of requirements gathering and through articulating and evidencing the value to the user base
3	Changes in knowledge management and sharing do not happen quickly. Time allows new ideas to be socialised and permits some reflection on practice

4	Organisational culture has a huge influence on how change is viewed and adopted and should be well understood. Technology cannot overcome cultural barriers.
5	Users and potential users do not always know what their requirements are or what the potential benefits are to them so it is important to communicate continuously and provide opportunities for learning and feedback ensuring that the CRM system can evolve
6	Sharing experiences with other organisations who have undergone, or are currently undergoing, a similar initiative is really valuable to sustain motivation and develop a learning community
7	Keeping the focus on the customer or external organisation and helping the internal user to see the system from the customer's perspective helps to maintain the impetus
8	Champions are necessary to help gain support and contributions and to provide real evidence of the benefits
9	Consider how the success of the initiative will be measured

Table II: Guidelines for a Successful CRM Implementation

This final point which addresses the measurement of success of the project has been given some considerable thought in practice. Davenport *et al.* (1998) mention a number of success indicators for knowledge management projects which are relevant in this case.

- Growth in the resources attached to the project.
- Growth in usage and volume of content or contributions.
- Likelihood that the project would survive without the support of one individual.
- Evidence of financial return.

Developing a set of metrics which will become the instrument by which success and impact can be measured will form part of the next stages of this project.

CONCLUSION

It is often stated that organisational culture, not technology has a greater impact on whether people exchange knowledge effectively (Orlikawski 1992). People are an organisation's most important resource and in the case of CIT, these people include employees, current students, researchers and external contacts. The complex links with the external communities include for instance: guest lecturers, external examiners, course advisory groups, recruiters, graduates, lifelong learners, professional and awarding bodies, sponsors, research and development partners, among others. Creating a structure which leverages information on existing interactions to develop benefits for more or improved interactions is the main motivation for this initiative. In the current economic climate it is seen as essential that the Irish higher education system interacts effectively with the enterprise community to contribute to the development of economic and social value. Using a CRM system to support the development of more and better-informed interactions has the potential to yield significant benefits. This paper describes the early stages in the development and implementation of such a system.

The implementation process has been undertaken in a sensitive way, recognising that changes such as this are cultural as well as technological. However there is a sense that the system is gaining acceptance. What started off with 3 users now has 40 users. Data is being entered into the system every day in the form of accounts, contacts, leads and engagements. Customisations, including

workflows are enhancing the system at regular intervals through interactions with the Higher Education Authority and the wider education community in Ireland it is intended that this system will provide the blueprint for a CRM for engagement nationally.

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